ET 920197489US

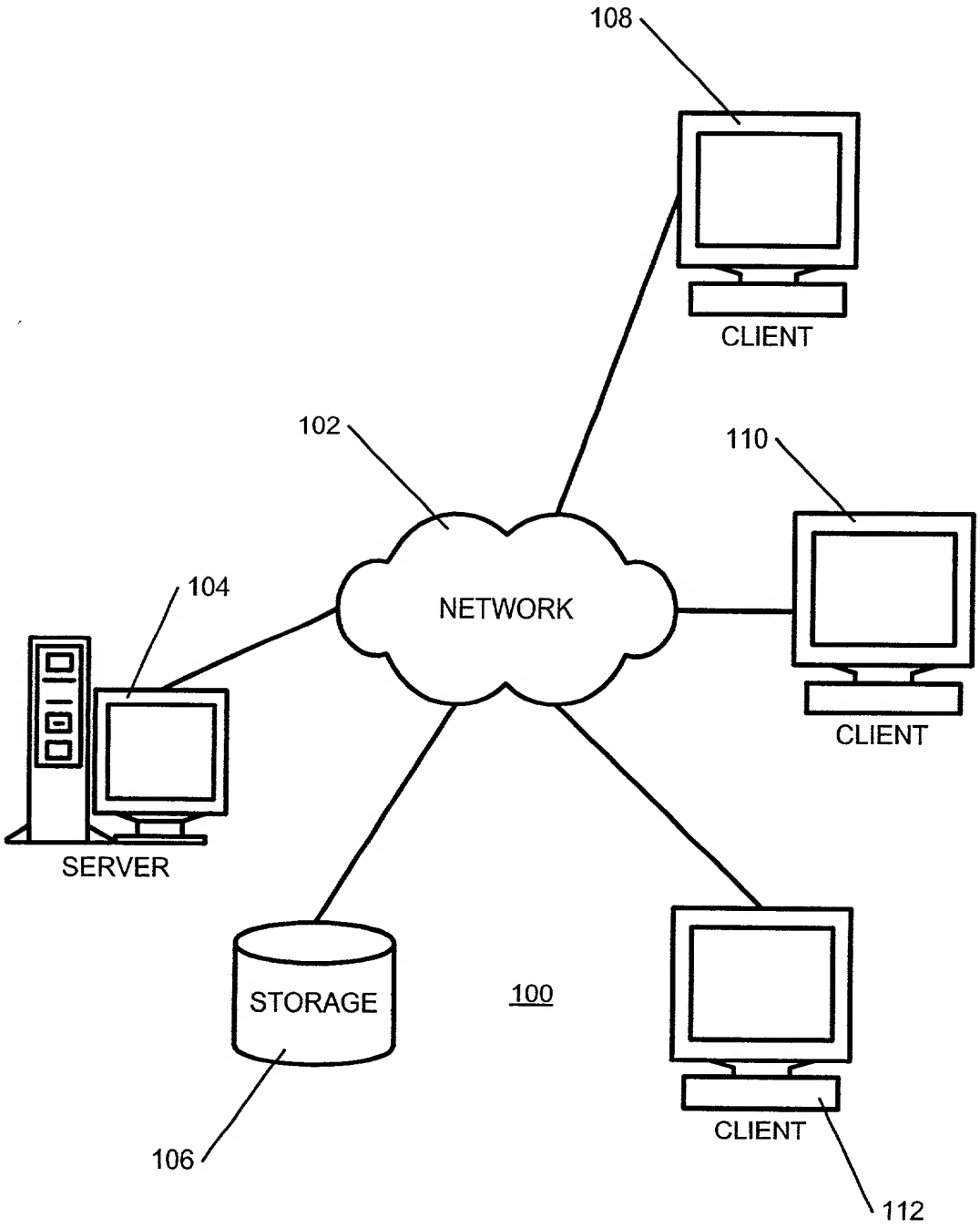

FIG. 1

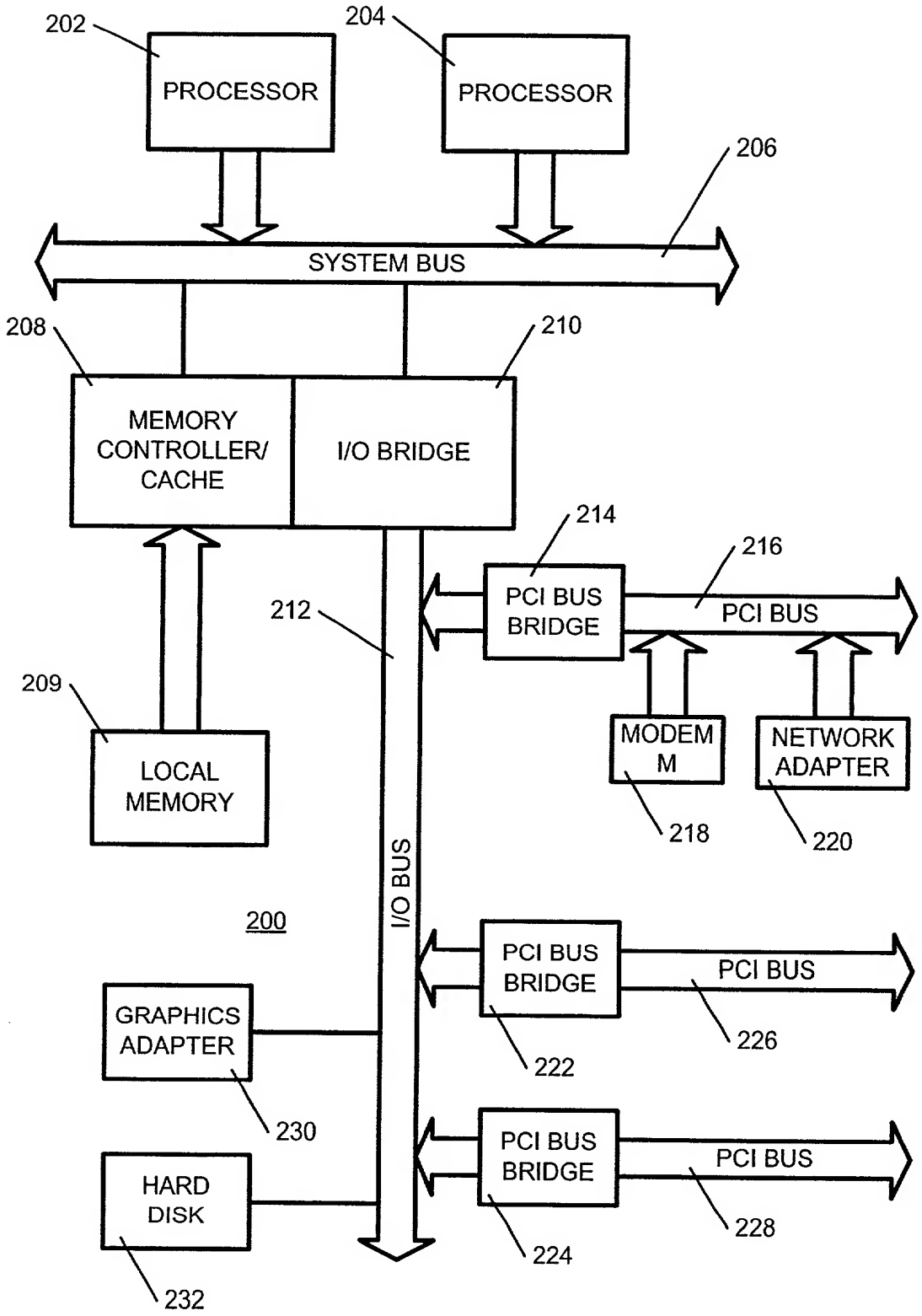
202
PROCESSOR
204
PROCESSOR
206
SYSTEM BUS
208
MEMORY CONTROLLER/ CACHE
210
I/O BRIDGE
214
PCI BUS BRIDGE
216
PCI BUS
212
209
LOCAL MEMORY
MODEM M
NETWORK ADAPTER
218
220
I/O BUS
200
PCI BUS BRIDGE
PCI BUS
GRAPHICS ADAPTER
226
222
230
PCI BUS BRIDGE
PCI BUS
HARD DISK
228
224
232

FIG. 2

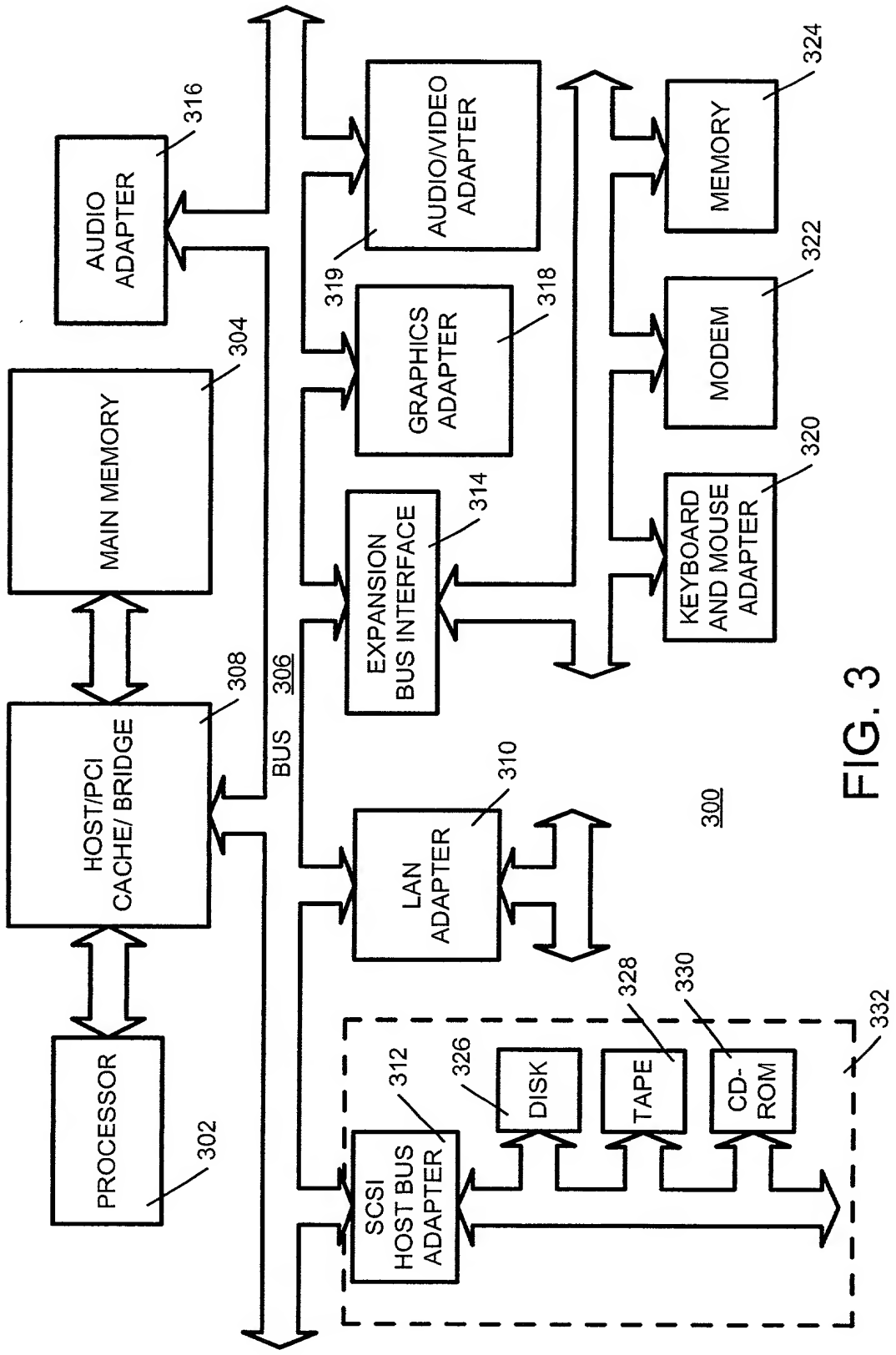
PROCESSOR
302
HOST/PCI CACHE/ BRIDGE
308
MAIN MEMORY
304
AUDIO ADAPTER
316
BUS
306
EXPANSION BUS INTERFACE
314
GRAPHICS ADAPTER
318
AUDIO/VIDEO ADAPTER
319
MEMORY
324
MODEM
322
KEYBOARD AND MOUSE ADAPTER
320
LAN ADAPTER
310
300
SCSI HOST BUS ADAPTER
312
DISK
326
TAPE
328
CD-ROM
330
332

FIG. 3

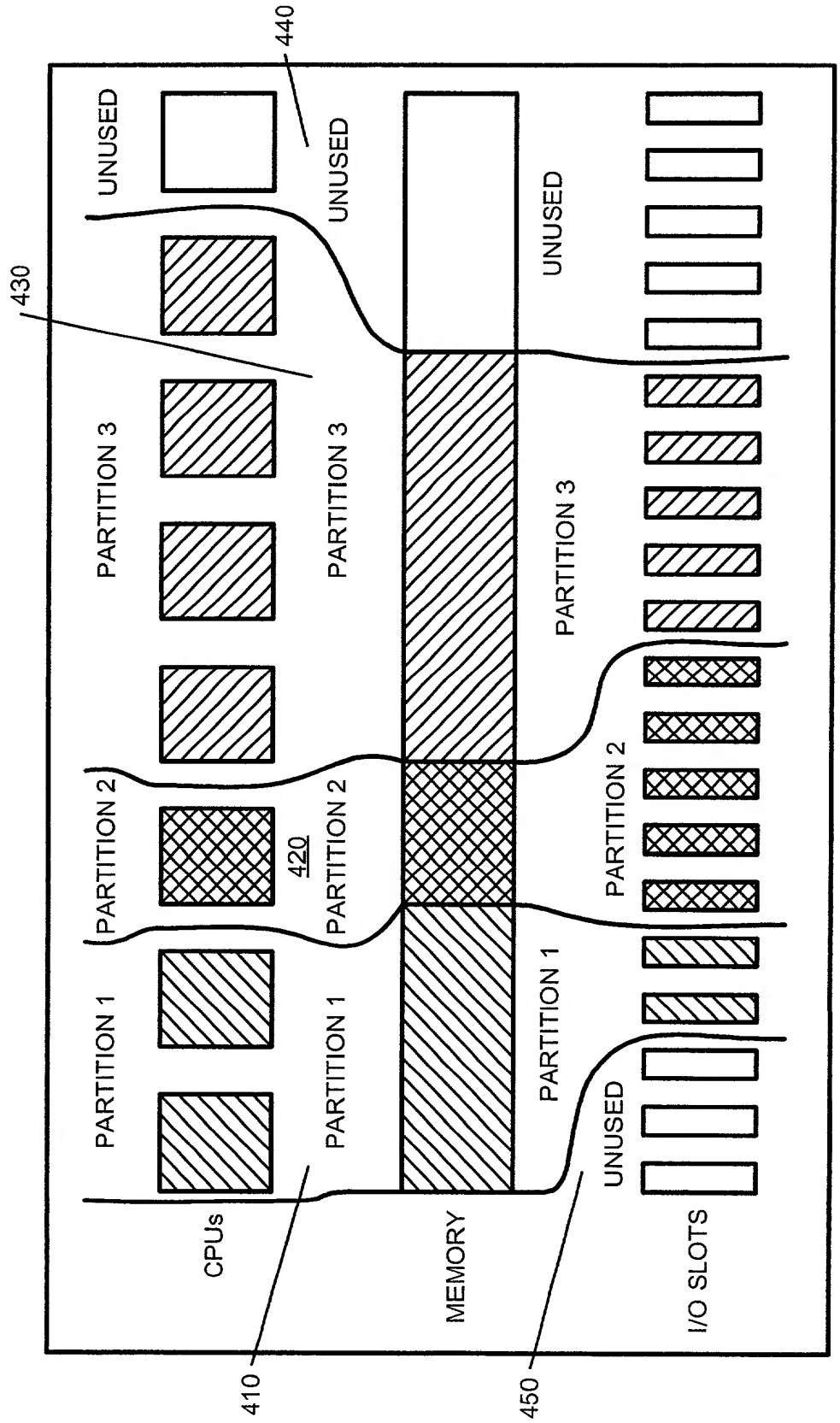
440
UNUSED
UNUSED
UNUSED
430
PARTITION 3
PARTITION 3
PARTITION 3
PARTITION 2
420
PARTITION 2
PARTITION 2
PARTITION 1
PARTITION 1
PARTITION 1
UNUSED
CPUs
MEMORY
I/O SLOTS
410
450

FIG. 4

PARTITIONS	SHARABLE DEVICES	NON-SHARABLE DEVICES
$PARTITION_1$	$DEVICE_1$	$DEVICE_1$
$PARTITION_2$	$DEVICE_2$	$DEVICE_2$
$PARTITION_3$	$DEVICE_3$	$DEVICE_3$
⋮	⋮	⋮

FIG. 5

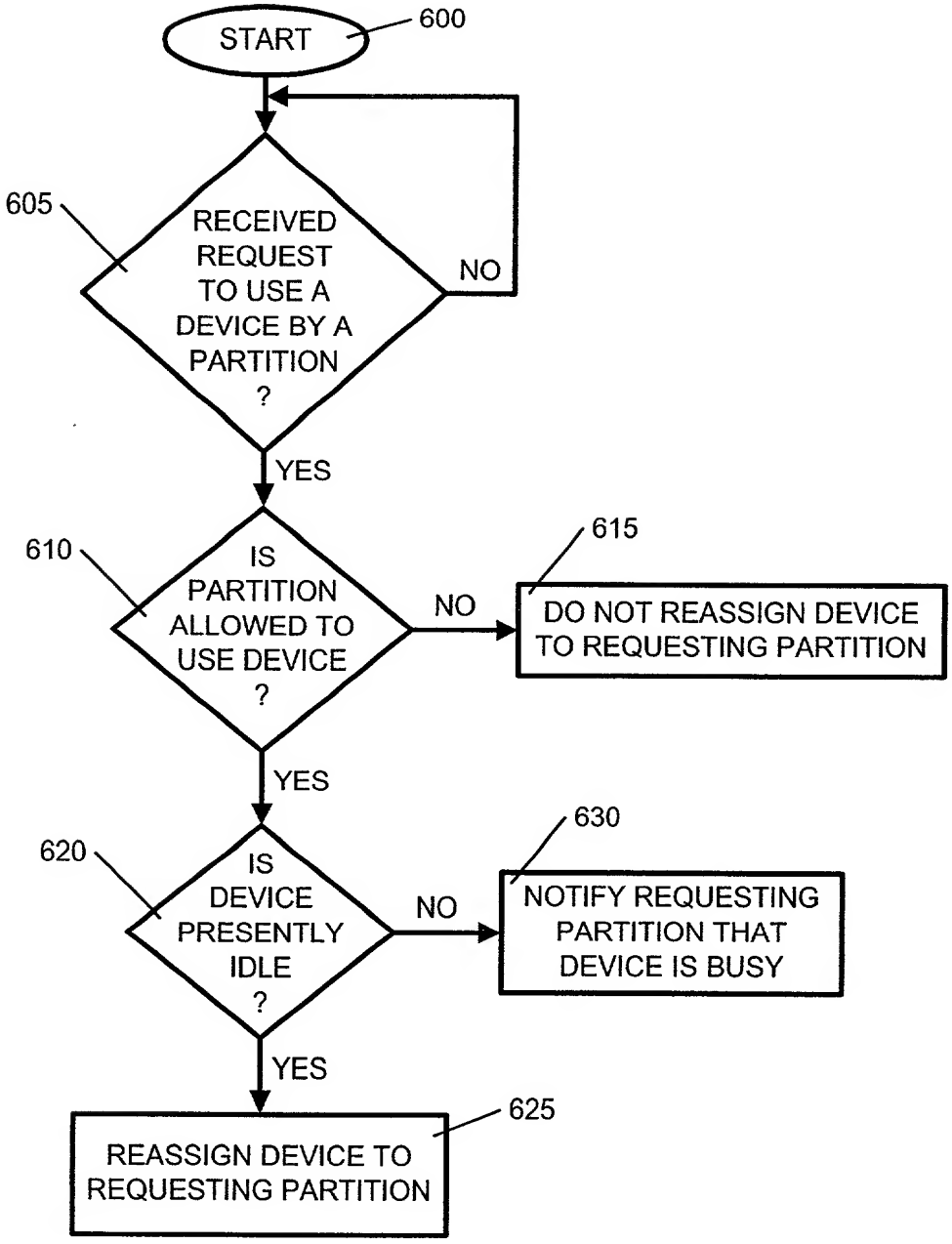
START
600
605
RECEIVED REQUEST TO USE A DEVICE BY A PARTITION ?
NO
YES
610
IS PARTITION ALLOWED TO USE DEVICE ?
NO
615
DO NOT REASSIGN DEVICE TO REQUESTING PARTITION
YES
620
IS DEVICE PRESENTLY IDLE ?
NO
630
NOTIFY REQUESTING PARTITION THAT DEVICE IS BUSY
YES
625
REASSIGN DEVICE TO REQUESTING PARTITION

FIG. 6